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Theme: FinTech Lending

- Marketplace Lending (MPL)
- (Product-) Market Based Lending
  – New version of “Keiretsu”

MPL Historically

- Laboratory to ask good questions
  - Moral hazard, information asymmetry
  - “Soft information” overcome these
- Retail investors are lenders, sophisticated and biased
  - See pictures, text, networks, coarse ratings
  - Extract soft information
  - Price these in reasonable ways

MPL Now

- A global phenomenon, especially China
  - Rau 2018

- The 2 papers look at the U.S.,
  - Changing nature of MPL
  - What are these changes? (Balyuk et al)
  - Impact of MPL on borrowers(Chava et al)
  - Interesting questions

1. Balyuk et al

- Nice overview of Prosper evolution:
  - Changes in interest rate setting process
  - Changes in scoring model and model disclosure
  - Changes in the nature and disclosure of soft information
  - Changes in the nature of lenders in MPL

- Overall trend: institutionalization
  - Shift to securitization model
  - Can cause changes in economic outcomes.

1. Balyuk et al

- Flavor of time series results
  - Funding rates go from 24% to 98%
  - Cancelation rates go from 5% to 27%
  - Estimated loss rates trend downward
  - Actual default rates trend down then inch up

- Prosper grades (AA to HR) matter
  - Even within narrow FICO bands

1. Balyuk et al

- Models of default rates
  - Prosper gives ELRs, estimated loss rates.
  - Neither ELR nor SCOREX is sufficient statistic.
  - ELR dominates FICO in predicting defaults

- Passive investors do worse than retail investors

1. Balyuk et al

- The table on Prosper versus FICO scores is curious
  - Changes in DRs within FICO are really stark
    - e.g., 0.95% to 15.02% for 780+ FICO borrowers
  - Need story and data.
    - Story: Why? What does Prosper do exactly?
    - Data: # observations, e.g., #AA, A, … E, in 780 FICO
    - Why they come to Prosper. At least conjectures

- Is the interest rate adjustment for risk enough?
  - Maybe changes in spread to changes in DR across ratings.

1. Balyuk et al

- Interesting narrative of platform's own strategy.
  - Securitization increases yet things become better.
  - Why? Story? Platform reputation building as originator?
  - Does the incentive to access funding dominate moral hazard?
  - Can we test or estimate a structural model?

2. Chava et al.

- Effects of borrowing from MPL
  - Credit levels of MPL borrowers
  - Defaults by MPL borrowers
  - What explains the results?

- The question is interesting.

- The data are interesting, a merge of MPL data with FICO data.

2. Chava et al.

- Many MPL borrowers consolidate debt
  - Is debt substitution a bad thing?
  - Is it surprising?

- MPL borrowers then borrow more starting [q+1]
  - Credit cards, but not auto, mortgage, etc.
  - Like to see focus on [MPL + CC]. How does this aggregate change over time?

- Borrowers default on MPL, not CC.
  - This seems to be cross-sectional. Is this an individual-level analysis?
  - if correct, why? CC defaults are perhaps more serious?

2. Chava et al.

- Post MPL default increases
  - What is it about MPL that triggers this behavior?
  - Is it selection effect of those that choose MPL?
  - Story: they go to MPL, stave off (unobservable) default, then longer term, default.
- Are post-MPL CC defaults strategic or forced?
  - Is there evidence of overconsumption?
- The IV specification
  - Instrument credit scores by MPL. Isn't MPL endogenous?
  - Maybe interact MPL with credit scores

2. Chava et al.

- I am somewhat reluctant to embrace the causal claims made here. They are perhaps unnecessary.

- k-n-n matching model rules out selection *on* but not *within* geography, i.e., unobservables.

- Do the main results reflect bad models of CC firms?
  - Why do they make these mistakes?
  - Can we say something about the CC firms? Extensive margin?
  - What does it say about CC firm objectives, market structure, and can we do some structural inferencing about these?

(Product-) Market Based Lending

淘宝网
Taobao.com

天猫 TMALL.COM

阿里巴巴
Alibaba.com™

Sales records used to give credit.
See “Digital Footprints” (Berg et al 2018)

3. Huang et al.

- Sellers on Taobao for physical goods
  - Generate digital footprints, which are scored by Ant Financial
  - Score = 380 to 680
  - Score of 480+ discontinuously more likely to get credit
- Research questions
  - Is there a fuzzy discontinuity?.
  - What is its effect?

3. Huang et al.

- A bit of an easter egg hunt to get to the economics.

- Main results
  - Access to Ant discontinuous in score at 480
  - Market share growth for those above 480

- Other things
  - Loan size and interest rate continuous in score
    - Conditional on access
  - Interest rate has curious "U" after 480
  - Almost 60% of firms don't use credit

3. Huang et al.

- What alternative financings available to sellers?
  - Formal
  - Informal
- Does actual usage matter?
  - 60% do not use.
  - So is Ant credit really a signal? To whom and for what purpose?
  - Or does the actual use of credit matter?
- Is there a selection in who chooses to take up Ant's offer?
  - Is there a discontinuity in this variable as well?
  - Firms way above 480 have higher interest rates.

3. Huang et al.

- Credit versus growth relation is not new
  - Banerjee and Duflo (Review of Economic Studies, 2014)

- Something special about *platform* credit ex-ante?
  - Ant's algorithm predicts growth
  - If so, what does IV mean? Picks up unobservables?
  - Need to unpeel ML algorithm more.

- Something special about *platform* credit ex-post?
  - Is discipline different?
  - What about it facilitates horizontal expansion?

3. Huang et al.

- Econometric questions
  - 0/1 treatment regressed on some continuous covariates.
  - Is instrumented access continuous? Is this OK?
  - Don't have good answers. May be just expositional.
- Amplification channel intriguing and very nice
  - Credit leads to growth, leads to more credit
  - How much of it is simply the operational decision of a particular platform and set of firms?
  - More on external validity of the experiment will have more impact.

Conclusion

- Institutionalization of MPL funding
  - Models similar to securitization. Good?
  - Does less democratization in funding create more democratization in credit access? Cheaper credit?
  - Or is it just borrower shifting?

- (Product)-Market Based Lending
  - Platform exploits the digital footprints it owns.
  - Footprints are credit relevant. Nice, but surprising?
  - More insights into channels and consequences